

PRESENILIN-2 N-TERMINAL PEPTIDE**Product Number P 2740**

Storage Temperature –20 °C

Product Description

Presenilin-2 N-terminal peptide is a purified, lyophilized synthetic peptide with a sequence corresponding to amino acid residues 31 to 47 of human Presenilin-2: Cys-Gln-Glu-Gly-Arg-Gln-Gly-Pro-Glu-Asp-Gly-Glu-Asn-Thr-Ala-Gln.¹ Purity is approximately 60% determined by ion spray mass spectrometry. This peptide has been used to produce polyclonal antisera to Presenilin-2.

The Presenilin-2 gene was recently discovered on chromosome 1 and is responsible for an early onset form of autosomal dominant Alzheimer's disease. The amino acid sequence is approximately 67% identical with that of the presenilin-1 protein. Both presenilin-1 and presenilin-2 are membrane proteins that have regions where mutations have been identified in family members with Alzheimer's disease. The gene sequence of presenilin-2 does not match any known human gene sequences other than that of presenilin-1. The function of these proteins remains speculative.

The effect of some amino-terminal fragments of presenilins on the production of amyloidic A β X-42 peptide and the accumulation of endogenous presenilin has been studied.²

Product Information**Precautions and Disclaimer**

Please consult the Material Safety Data Sheet for handling recommendations before working with this material.

Preparation Instructions

Reconstitute in sterile deionized water (Sigma Product No. W 4502). Gently mix at room temperature for 15 minutes.

Storage/Stability

After reconstitution, Presenilin-2 N-terminal peptide is stable for up to one month at 2–8 °C. For long term storage, freeze at –20 °C.

References

1. Levy-Lahad, E., et al., Candidate gene for the chromosome 1 familial Alzheimer's disease locus. *Science*, **269**, 973–977 (1995).
2. Shirota, K., et al., Effects of presenilin N-terminal fragments on production of amyloid beta peptide and accumulation of endogenous presenilins, *Neurosci. Lett.*, **26**, 37–40 (1999).

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